

Serial No. 10/734,803  
Page 2 of 11

Do not enter claims  
of 30 May 2007.

RECEIVED  
CENTRAL FAX CENTER

MAY 30 2007

MC 6/14/07

**IN THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1 1. (currently amended) An optical switch, comprising:  
2 a first optical combiner for combining at least two optical pump signals to  
3 produce a combined pump signal, and a second optical combiner for combining  
4 an input data signal with the combined pump signal to produce a combined signal;  
5 a non-linear optical element for imparting a ~~third-order~~ non-linear effect on the  
6 combined signal; and  
7 at least one optical splitter for separating the combined signal from said non-linear  
8 optical element into respective generated optical bands;  
9 wherein at least one of said at least two optical pump signals is controllably  
10 modulated such that a logic sequence of said input data signal is controllably switched.

1 2. (original) The optical switch of claim 1, further comprising at least two optical  
2 pump sources, each of said sources providing one of said at least two optical pump  
3 signals, wherein at least one of said at least two optical pump sources is adapted to  
4 controllably modulate its respective optical signal such that a logic sequence of said input  
5 data signal is controllably switched and an output signal of said optical switch comprises  
6 a multi-band switched optical signal.

1 3. (original) The optical switch of claim 1, wherein the frequency of said input data  
2 signal is substantially equal to the average of the frequencies of said at least two optical  
3 pump sources.

560116-1